TABLE OF CONTENTS

CERTIFICATE
CERTIFICATE FROM THE GUIDE
DECLARATION
ACKNOWLEDGEMENT
LIST OF TABLES
LIST OF GRAPHS
LIST OF MAPS
LIST OF PHOTOS
ABBREVIATIONS

I. INTRODUCTION
II. REVIEW OF LITERATURE
III. STUDY AREA
IV. CHANGING LAND USE PATTERN OF MYSORE CITY

FROM – 1995 – 2011

V. CHANGING LAND USE PATTERN AND ITS IMPACTS ON
ENVIRONS OF MYSORE CITY

VI. SUGGESTIONS, FINDINGS AND CONCLUSIONS

BIBLIOGRAPHY
PUBLICATIONS
# CHAPTER – 1

## INTRODUCTION

1.1 INTRODUCTION 1-2
1.2 MEANING OF LAND USE 2-4
1.3 STATEMENT OF THE PROBLEM 4
1.4 IMPORTANCE OF THE STUDY 4
1.5 OBJECTIVES OF THE STUDY 5
1.6 RESEARCH METHODOLOGY 6-7
1.7 LIMITATIONS OF THE STUDY 7-8
1.8 ORGANISATION OF THE THESIS 8-9

# CHAPTER – 2

## REVIEW OF LITERATURE 10-21

2.1 INTRODUCTION 10
2.2 INTERNATIONAL REVIEWS 10-15
2.3 NATIONAL REVIEWS 15-20
2.4 REGIONAL STUDIES 20-21
2.5 CONCLUSION 21

# CHAPTER – 3

## STUDY AREA 22-40

3.1 INTRODUCTION 22-23
3.2 TOPOGRAPHY 24
3.3 CLIMATE 24-28
3.3.1 Temperature
3.3.2 Humidity
3.3.3 Wind Direction
3.3.4 Rain Fall
3.3.5 Cloudiness
3.4 GEOLOGY 28
3.5 SOILS 28
3.6 GREEN BELT 28-29
CHAPTER – 4

CHANGING LAND USE PATTERN OF MYSORE CITY FROM –

1995 – 2011

4.1 INTRODUCTION 41-42
  4.1.1 Physical Factors
  4.1.2 Economic Factors
  4.1.3 Industries
  4.1.4 Tourism
  4.1.5 Land Value

4.2 POPULATION GROWTH 43-48

4.3 TO IDENTIFY, ASSESS AND TO ANALYZE THE CHANGING LAND USE PATTERN OF MYSORE CITY FROM 1995 – 2011

  4.3.1 Changing land use pattern in Mysore city from 1995, 2001, and 2011

  4.4.1 Residential land use 48-52
4.4.3 Commercial land use 52-55
4.4.4 Industrial land use 55-57
4.4.5 Parks and Open Spaces 58-60
4.4.6 Public and semi Public 60-63
4.4.7 Traffic and Transportation 63-66
4.4.8 Agricultural land use 66-68
4.4.9 Public Utility 69-70
4.4.10 Water Bodies 71-73
4.4.11 Nehru Loka 73
4.4.12 Conclusion 74

4.5 IMPACT OF POPULATION IN GROWTH AND DENSITY ON LAND USE CHANGES IN MYSORE CITY FROM 1901 – 2011 74-82
4.5.1 Introduction 74
4.5.2 Stage I – 1901 to 1931 75
4.5.3 Stage II – 1931 – 1951 75
4.5.4 Stage III – 1951 – 1971 75-76
4.5.5 Stage IV – 1971 – 1991 76
4.5.6 Stage V – 1991 – 2011 76-77

4.6 POPULATION GROWTH AND LAND USE PROJECTION FROM 2011 – 2031. 77-81
4.6.1 Conclusion 82

CHAPTER – 5
CHANGING LAND USE PATTERN AND ITS IMPACTS ON ENVIRONS OF MYSORE CITY 83-156

5.1 LAND USE AND GLOBAL ENVIRONMENT CHANGE 83-84
5.1.1 Land Use and Environment Change in India 83
5.1.2 Impact of Land use change on Environ of Mysore city 83-84

5.2 IMPACT ON RAINFALL AND TEMPERATURE 85-86
5.2.1 Variation of annual rainfall in Mysore city 86-88

5.2.3 Conclusion 91

5.2.4 Variation of temperature 91


5.2.6 Variation of temperature during summer season 93-94

5.2.7 Annual Temperature 94-95

5.2.8 Conclusion 95

5.3 IMPACT OF CHANGING LAND USE ON AIR POLLUTION OF MYSORE CITY 96-103

5.3.1 Introduction 96

5.3.2 Air quality and Air Pollution of Mysore city 96

5.3.3 Pollutants 96-98

5.3.4 Conclusion 99-100

5.3.5 Recent Air quality index in different locations at Mysore city 100-102

5.3.6 Result 102

5.3.7 Conclusion 103

5.4 IMPACT OF LAND USE CHANGES ON LAKES OF MYSORE CITY 103-112

5.4.1 Introduction 103-105

5.4.2 The important dried lakes of Mysore city

5.4.3 Doddakere

5.4.4 Subbarayanakere

5.4.5 Devaiahnahundi lake

5.4.6 The most important polluted lakes of the Mysore city 105-112

5.4.7 Kukkarahalli lake

5.4.8 Karanji lake

5.4.9 Lingambudi lake

5.4.10 Hebballeke

5.4.11 Devanur lake

5.4.12 Dalvoy lake

5.4.13 Conclusion 112
5.5 IMPACT OF LAND USE CHANGE ON GROUND WATER QUALITY

5.5.1 Introduction 112
5.5.2 Mysore city Ground water sampling stations 113-114
5.5.3 Ground water samplings materials and methods 115-116
5.5.4 Concentration of Heavy metals in ground water samples 117-118
5.5.5 Mysore city ground water samples physio - chemical characteristics 118-134
5.5.6 Heavy metals in ground water samples at Mysore city 135
5.5.7 Statistical Analysis of Ground water samples of Mysore city 135-140
5.5.8 Correlation with ground water samples pre monsoon April – 2017
5.5.9 Correlation with ground water samples pre monsoon November – 2017
5.5.10 Water quality Index and Hydro geo chemistry of ground water of Mysore city 141-149
5.5.11 Calculation of Water Quality Index 149
5.5.12 Conclusion 149

5.6 CHANGING LAND USE IMPACT ON AGRICULTURE LAND 149-151

5.6.1 Conclusion

5.7 CHANGING LAND USE IMPACTS ON RESIDENTIAL LAND VALUE 151-153

5.7.1 Growth of Real Estate 153-156
5.7.2 Conclusion 156

CHAPTER – 6

SUGGESTIONS, FINDINGS AND CONCLUSIONS 157-168

6.1 SUMMARY OF THE STUDY 157
6.2 FINDINGS OF THE STUDY 157-160
6.3 CONCLUSION 160-162